



accelerated, resulting in as many cleanups in 12 months as were completed in the program's first decade. sites and return them to productive use. List of toxic chemicals reported to public under community right-to-

# HEALTHY PLANET

“Think Globally, Act Locally,” urged a popular bumper sticker that appeared in the late 1980s. The slogan is a reminder of the environmental roles and responsibilities we all share. Cumulatively, local decisions and issues impact global environmental conditions.

EPA recognizes that making progress in environmental protection depends on the work we do, as individuals, businesses and organizations, to minimize the environmental impacts of our daily activities. Region 8 works with various partners to promote local decision-making that considers the basic question, “How can I become more efficient in how I use the earth’s resources?” We can all do better, and Region 8 is involved in many programs and partnerships that offer technical assistance and incentives to change in ways that benefit the planet and, often, yield economic benefits as well.

## ***Pollution Prevention (P2)***

With the 1990 Pollution Prevention Act, EPA made pollution prevention a strategy of choice. By 2000, some 19,000 companies nationwide are expected to be participating in voluntary pollution prevention programs. Their participation will save them almost \$7 billion a year in energy, raw materials, and waste treatment and disposal costs. In Region 8, proactive prevention efforts encompass several areas.

Toxic waste reduction focuses on substances that harm people when inhaled, swallowed or absorbed through the skin. As tracked in the 1997 Toxics Release Inventory (TRI), large industrial and federal facilities in Region 8 released a total of 168 million pounds of toxics into the air, surface water and land. However, these facilities also recycled over 157 million pounds of toxics and used another 36 million for energy recovery. According to the past 10 years of TRI reporting, Region 8 industries have cut their on- and off-site releases of TRI chemicals by nearly 25%, or 50 million pounds, since 1988.

Solid waste reduction and recycling means less use of limited natural resources and less waste sent to landfills. These activities also provide substitute raw materials for manufacturing and promote economic growth by creating new market opportunities. Two EPA programs support this important effort.

- EPA’s WasteWise program encourages businesses to adopt cost-effective practices to reduce solid waste generation, collect waste materials for recycling, and increase the manufacturing or purchase of recycled products. Nationally, since 1994, participants have recycled more than 10 million tons and have purchased more than six million tons of recycled products. Region 8 currently has 31 WasteWise business partners.

• The Jobs Through Recycling initiative (JTR) expands markets for recycled and reusable materials, stimulates economic development and creates jobs. From 1994 to 1999, this program offered grants, market information outreach and networking among recycling professionals. In Montana, for example, a \$35,000 JTR grant to develop local markets for recycled glass has diverted more than 1,000 tons of post-consumer solid waste from landfills.



*Cardboard recycling facility. Reusing and recycling materials can minimize waste volumes sent to landfills, conserve natural resources and, in many cases, save money.*

### **Energy Efficiency**

Residential and commercial electricity use has increased significantly in the past few decades. In Colorado, for example, residential use doubled and commercial use tripled between 1992 and 1997 alone. Most of this electricity is generated by coal-burning power plants with emissions that can degrade air quality.

With growing demands for power, energy-efficiency measures offer opportunities for individuals and businesses to save money and prevent pollution. These efforts are

targeted at promoting renewable energy such as solar and wind power, reducing energy consumption, and ensuring that energy resources are used efficiently.

In 1991, EPA launched Green Lights®, a voluntary program to encourage corporations, government agencies, and other institutions to install energy-efficient lighting. The program demonstrated that pollution prevention was not only environmentally sound, but profitable too. Green Lights became EPA's flagship prevention program, leading to the current ENERGY STAR® program.

ENERGY STAR is a voluntary partnership between EPA, the U.S. Department of Energy, product manufacturers, local utilities and retailers that promotes energy efficiency, reduces air pollution and decreases operating costs. Targeted sectors include homes, small businesses, buildings and products. By choosing ENERGY STAR products, businesses and consumers



*Wetlands revegetation. Individual actions make all the difference in the health of our global environment.*

### **EPA's ENERGY STAR Buildings<sup>sm</sup> Partnership**

Cumulative Impacts in Region 8

- Reduced energy bills for 117 participants by \$530.4 million
- Kept 732.8 million pounds of carbon dioxide (CO<sub>2</sub>) out of the atmosphere
- Removed pollution equivalent to 25,100 cars
- Provided environmental benefits equivalent to planting 34,400 acres of trees
- Prevented emissions of 3.9 million pounds of sulfur dioxide (SO<sub>2</sub>) and 3.3 million pounds of nitrogen oxides (NO<sub>x</sub>)

*As of January 1, 2000*

keep their utility bills down while helping the environment.

Region 8 has recognized 11 ENERGY STAR buildings which, taken together, comprise 6.7 million square feet. The energy-efficiency measures they have adopted are saving the building owners \$1.7 million per year. Region 8's headquarters building in Denver was recently designated an ENERGY STAR building in recognition of the owner's success in improving energy performance. Region 8 has cultivated 234 allies and partners in the ENERGY STAR Buildings Program and 107 in the ENERGY STAR Homes Program.

### **Global Warming and Climate Change**

While scientists and politicians continue to debate the global warming/climate change issue, one thing is clear: All evidence points to a correlation between carbon

**Updating remedies at Superfund sites saves potentially responsible parties and the program more than \$1  
Companies, facilities, states and localities develop innovative ways to achieve results in common-sense and**



dioxide (CO<sub>2</sub>) levels and global temperature. According to Antarctic ice core measurements, CO<sub>2</sub> levels are higher today than at any time in the past 160,000 years. Those who believe global warming is happening conclude that if CO<sub>2</sub> levels continue to rise at this rate, temperatures will likely rise too.

Region 8 provides information to the public regarding the possible impacts of global warming, and what can be done to reduce CO<sub>2</sub> emissions and other gases that contribute to the greenhouse effect. Outreach efforts are targeted to four sectors which are likely to be adversely impacted by climate change. These sectors -- which are also uniquely capable of reducing greenhouse gas emissions or communicating the risks of climate change to the public -- include cities, forests and agricultural land managers, outdoor recreation and wildlife organizations, and businesses, lenders and insurance companies.

EPA's ClimateWise program also helps companies turn energy efficiency and pollution prevention into corporate assets. Participants reduce energy use and greenhouse gas emissions and learn how to raise profits and productivity through management practices focused on avoiding costly remedial environmental work. Participants are encouraged to innovate in designing approaches that work best for their organization. Region 8 currently has 40 ClimateWise partners.

### ***Wealthy shoes leave a bigger "ecological footprint"***

By choosing P2 options such as ENERGY STAR products, individuals can help reduce the huge "ecological footprint" of our consumer-oriented society. Did you know, for example, that the average American consumes about 50 times more goods and services than the average Chinese? With less than 5% of the world's population, we consume about 20% of all metals, 25% of all fossil fuels, and 33% of all paper produced. Our 270 million citizens drive as many miles as the rest of the world combined. We also produce about 72% of the world's toxic waste. Personal choices add up. Next time you're at the hardware store or shopping for a new vehicle, consider the consequences of your purchases. When multiplied by 270 million consumers, lifestyle choices such as higher-mpg cars, compact fluorescent lightbulbs, and energy-efficient windows and appliances make a big difference.

### ***Polychlorinated Biphenyls (PCBs)***

PCBs are very stable man-made chemicals that bioaccumulate in living things at the top of the food chain, including fish, birds, mammals and humans. Commonly used as insulating fluids in electrical equipment, PCBs have been found all over the world, constituting a global threat to human health and ecosystems. For example, PCBs interfere with the reproduction of phytoplankton -- the base of the ocean food chain

and a large contributor to the world oxygen supply.

EPA Region 8 recently presented a paper, "PCBs, Mining, and Water Pollution," to the international community at the 1999 International Hazardous Waste Management conference in Tucson, AZ. The Region is working with the United Nations Environmental Program (UNEP) on worldwide distribution of the paper, which describes the hazards of abandoning PCBs in underground mines. Region 8 is also partnered with UNEP in conducting an inventory of PCBs in the former Soviet Republics and third-world countries.

### ***The Boulder Energy Conservation Center: ReSource 2000***

Construction and demolition debris makes up 15-25% of total U.S. landfill volume. ReSource 2000 is an EPA-supported nonprofit organization that demonstrates how homes and buildings can be "deconstructed" instead of demolished, to extract reusable or recyclable materials. For example, demolishing a 3,000-square-foot house would fill 15 large dumpsters with trash bound for the landfill. Instead, ReSource 2000 can salvage up to 80% of the materials for reuse or recycling, reducing the landfill waste to three dumpster loads. The reusable materials -- doors, lumber, windows, lighting, fixtures, sinks, etc -- are sold for 50-70% of retail.